Amendments to the Claims

1. *(Currently Amended)* A method of fabricating a set of semiconducting nanowires ~~(10)~~ having a desired wire diameter ~~(d)~~, the method comprising the steps of:

- providing a set of pre-fabricated semiconducting nanowires ~~(10^2)~~, at least one pre-fabricated semiconducting nanowire having a wire diameter ~~(d^2)~~ larger than the desired wire diameter ~~(d)~~, and
- reducing the wire diameter of the at least one pre-fabricated nanowire ~~(10^2)~~ by etching, the etching being induced by electromagnetic radiation which is absorbed by the at least one pre-fabricated nanowire ~~(10^2)~~, a minimum wavelength of the electromagnetic radiation being chosen such that the absorption of the at least one pre-fabricated nanowire being significantly reduced when the at least one pre-fabricated nanowire reaches the desired wire diameter ~~(d)~~.

2. *(Currently Amended)* A method as claimed in claim 1, wherein:

- a radiation source ~~(30)~~ is used which emits the electromagnetic radiation inducing the etching and electromagnetic radiation having a wavelength shorter than the minimum wavelength, and
- the electromagnetic radiation emitted by the radiation source ~~(30)~~ is spectrally filtered for substantially reducing electromagnetic radiation having a wavelength shorter than the minimum wavelength.

3. *(Currently Amended)* A method as claimed in claim 1, wherein prior to the step of reducing the wire diameter substantially all the pre-fabricated semiconducting nanowires have a diameter ~~(d^2)~~ larger than or equal to the desired wire diameter ~~(d)~~.

4. *(Currently Amended)* A method as claimed in claim 1, wherein the light inducing the etch treatment is linearly polarized along an axis ~~(40)~~.

5. *(Currently Amended)* A method as claimed in claim 1, wherein the light inducing the etch treatment has a first component being linearly polarized along a first

axis ~~(40)~~ and a second component being linearly polarized along a second axis ~~(41)~~ forming an angle larger than zero with the first axis ~~(40)~~.

6. *(Original)* A method as claimed in claim 5, the first component has a first spectrum with a first minimum wavelength and the second component has a second spectrum with a second minimum wavelength different from the first minimum wavelength.

7. *(Original)* A method as claimed in claim 5, wherein the first component has a first intensity and the second component has a second intensity different from the first intensity.

8. *(Currently Amended)* A method as claimed in claim 1, wherein the desired wire diameter ~~(d)~~ comprises zero.

9. *(Original)* A method as claimed in claim 8, wherein the light inducing etching of nanowires having a desired wire diameter of zero is linearly polarized.

10. *(Currently Amended)* A method as claimed in claim 1, wherein the pre-fabricated semiconducting nanowires ~~(10)~~ are supported by a substrate ~~(20)~~.

11. *(Currently Amended)* A method as claimed in claim 10, wherein the substrate ~~(20)~~ comprises an electrical conductor ~~(110)~~, the pre-fabricated semiconducting nanowires ~~(10)~~ being electrically conductively connected to the electrical conductor ~~(110)~~.

12. *(Currently Amended)* A method as claimed in claim 10, wherein the substrate ~~(20)~~ has a surface ~~(23)~~ constituted by a part ~~(23a)~~ supporting the pre-fabricated semiconducting nanowires ~~(10)~~ and another part ~~(23b)~~ being free from the part ~~(23a)~~, at least the other part ~~(23b)~~ being etch resistant.

13. *(Currently Amended)* A method as claimed in claim 12, wherein the substrate ~~(20)~~ comprises a first layer ~~(24)~~ which is not etch resistant, and a second

layer ~~(25)~~ which is etch resistant, the second layer ~~(25)~~ constituting the other part of the surface ~~(20)~~.

14. *(Currently Amended)* A method as claimed in claim 13, wherein the second layer ~~(25)~~ is connected to the first layer ~~(24)~~ by a chemical bond.

15. *(Currently Amended)* A method as claimed in claim 13, wherein the second layer ~~(25)~~ is composed of one or more materials selected from alkyltriethoxysiloxane and alkyltrimethoxysiloxane.

16. *(Currently Amended)* A method as claimed in claim 10, wherein the step of providing the pre-fabricated semiconducting nanowires ~~(10')~~ comprises the following sub-steps:

- providing the substrate ~~(20)~~, a surface of the substrate being etchable, and
- growing semiconducting nanowires ~~(10')~~ on the surface of the substrate, the grown semiconducting nanowires being the pre-fabricated semiconducting nanowires,

and after the step of providing the pre-fabricated semiconducting nanowires and prior to the step of reducing the wire diameter of the at least one pre-fabricated nanowire by etching the exposed surface of the substrate is covered by an etch resistant layer ~~(25)~~.

17. *(Currently Amended)* A method as claimed in claim 10, wherein the pre-fabricated semiconducting nanowires ~~(10)~~ are distributed over the surface ~~(23)~~, a first part ~~(18)~~ of the surface being irradiated by light for inducing the etch treatment, pre-fabricated semiconducting nanowires ~~(10)~~ in a second part ~~(19)~~ of the surface being prevented from etching.

18. *(Currently Amended)* A method as claimed in claim 10, wherein the pre-fabricated semiconducting nanowires ~~(10)~~ are distributed over the surface, a first part ~~(18)~~ of the surface area being irradiated by a first light intensity, a second part ~~(19)~~ of

the surface free from the first part ~~(18)~~ of the surface being irradiated by a second light intensity smaller than the first light intensity.

19. *(Currently Amended)* A method as claimed in claim 10, wherein the pre-fabricated semiconducting nanowires ~~(10)~~ are distributed over the surface, a first part ~~(18)~~ of the surface being irradiated by light having a first minimum wavelength, a second part ~~(19)~~ of the surface being irradiated by light having a second minimum wavelength different from the first minimum wavelength.

20. *(Currently Amended)* A method of manufacturing an electric device ~~(100)~~ comprising a set of nanowires ~~(10)~~ having a desired wire diameter ~~(d),~~ each nanowire ~~(10)~~ of the set being electrically connected to a first conductor ~~(110)~~ and to a second conductor ~~(120),~~ the method comprising the steps of:

- fabricating the set of semiconducting nanowires having the desired wire diameter according to ~~the method of any of the Claims 1 to 19~~claim 1, and
- electrically contacting the nanowires of the set to a first conductor ~~(110)~~ and to a second conductor ~~(120).~~

21. *(Currently Amended)* An electric device ~~(100)~~ comprising a set of semiconducting nanowires ~~(10),~~ the set comprising a first subset ~~(10a)~~ of nanowires each having a first wire diameter ~~(da)~~ and a second subset of nanowires ~~(10b)~~ each having a second wire diameter ~~(db)~~ different from the first wire diameter ~~(da),~~ the nanowires ~~(10a)~~ of the first subset being attached to a first part of a substrate ~~(110a),~~ the nanowires ~~(10b)~~ of the second subset being attached to a second part ~~(110b)~~ of the substrate free from the first part ~~(110b).~~

22. *(Currently Amended)* An electric device ~~(100)~~ as claimed in Claim 21, wherein the nanowires ~~(10a)~~ of the first subset are electrically connected to a conductor ~~(110a),~~ the nanowires ~~(10b)~~ of the second subset are electrically connected to a further conductor ~~(110b),~~ the conductor ~~(110a)~~ being electrically insulated from the further conductor ~~(110b).~~

23. *(Currently Amended)* An electric device ~~(100)~~ as claimed in Claim 21, wherein the nanowires ~~(10)~~ comprises a p-doped part ~~(10p)~~ and a n-doped part ~~(10n)~~ forming a p-n junction.

24. *(Currently Amended)* An electric device ~~(100)~~ as claimed in Claim 23, wherein the n-doped part ~~(10n)~~ is electrically connected to a first conductor ~~(110)~~ having a first distance ~~(ln)~~ to the p-n junction, the p-doped part ~~(10p)~~ is electrically connected to a second conductor ~~(120)~~ having a second distance ~~(lp)~~ to the p-n junction smaller than the first distance ~~(ln)~~.

25. *(Currently Amended)* An electric device as claimed in ~~Claim 23 or 24~~claim 23, wherein the n-doped part ~~(10n)~~ has a wire diameter ~~(dn)~~ which is larger than a wire diameter ~~(dp)~~ of the p-doped part ~~(10p)~~.

26. *(Currently Amended)* An apparatus ~~(29)~~ for light induced etching of nanowires ~~(10),~~ comprising:

- a light source ~~(30)~~ for emitting light inducing the etching of the nanowires ~~(10)~~ and
- a monitor unit ~~(35)~~ for monitoring a light signal emitted by the nanowires ~~(10)~~ during the etching, the light signal being indicative for the wire diameter of the nanowires ~~(10)~~.

27. *(Currently Amended)* An apparatus ~~(29)~~ as claimed in Claim 26, further comprising a system control unit 36 for controlling the light source ~~(30)~~ in dependence of the light signal monitored by the monitor unit ~~(35)~~.

28. *(Currently Amended)* An apparatus ~~(29)~~ as claimed in Claim 26, further comprising a polarizer ~~(39)~~ for polarizing the light inducing the etching.

29. *(Currently Amended)* An apparatus ~~(29)~~ as claimed in Claim 26, further comprising an optical element ~~(38)~~ for rotating a polarization of the light inducing the etching.